



Attorney Docket 161,700-079

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

**ST. GERMAIN et al.**

**Serial No.: 10/654,368**

Filed: September 2, 2003

For: COUNTERPULATIONS DEVICE  
WITH INCREASED VOLUME-  
DISPLACEMENT EFFICIENCY AND  
METHODS OF USE

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97–1.98, information relating to the above-identified application is hereby disclosed. The accompanying Form PTO-1449 provides a listing of documents that may be relevant to the subject application.

It is requested that the Examiner fully consider the art cited in the accompanying Form 1449, initial the left-most column of the form adjacent each cited reference, and return a copy for Applicants' records. It is further requested that the art be cited on the cover of any patent issuing from the subject application.

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**CERTIFICATE OF MAILING (37 C.F.R. §1.8a)**

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

January 23, 2004  
Date of Deposit  
IR1:1051384.1

Cynthia B. Pacheco  
Cynthia B. Pacheco

In accordance with §1.97(b), this Information Disclosure Statement is being filed before the mailing of a first Office Action on the merits of the above-identified application, and therefore no fee is required. If a first Office Action has been mailed, then please enter this Information Disclosure Statement and charge Deposit Account No. 50-2862 for any necessary fees.

Copies of each of the references listed on the attached Form PTO-1449, excluding the U.S. Patents, are enclosed herewith.

This statement should not be construed as a representation that more material information does not exist or that an exhaustive search of the relevant art has been made. Nor does this statement constitute an admission by Applicants or Applicants' agent that the information provided herein is necessarily prior art to Applicants' invention. Moreover, Applicants reserve the right to establish the patentability of the claimed invention over any of the listed documents should they be applied there-against as references. Please charge any deficiency or credit any overpayment to Deposit Account No. 50-2862.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: January 14, 2004

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

## Complete if Known

Application Number	10/654,368
Filing Date	September 2, 2003
First Named Inventor	ST. GERMAIN
Group Art Unit	
Examiner Name	Not yet assigned
Attorney Docket Number	161,700-079

## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	AA	6,296,654		Ward	10/2001	
	AB	6,190,304		Downey et al.	02/2001	
	AC	5,855,210		Sterman et al.	01/1999	
	AD	5,827,237		Mocoviak	10/1998	
	AE	5,820,593		Safar	10/1998	
	AF	5,814,016		Valley et al.	09/1998	
	AG	5,716,386		Ward et al.	02/1998	
	AH	5,711,754		Miyata et al.	01/1998	
	AI	5,702,368		Stevens et al.	12/1997	
	AJ	5,678,570		Manning	10/1997	
	AK	5,662,671		Barbut et al.	09/1997	
	AL	5,599,329		Gabbay	02/1997	
	AM	5,531,776		Ward et al.	07/1996	
	AN	5,458,574		Machold et al.	10/1995	
	AO	5,449,342		Hirose et al.	09/1995	
	AP	5,437,633		Manning	08/1995	
	AQ	5,334,142		Paradis	08/1994	
	AR	5,330,498		Hill	07/1994	
	AS	5,330,451		Gabbay	07/1994	
	AT	5,195,942		Weil et al.	03/1993	

## FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	AU	WO	99/30765					
	AV	WO	99/58174					
	AW	WO	99/15227					
	AX							
	AY							
	AZ							
	BA							
	BB							
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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet 2 of 3

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First Named Inventor	ST. GERMAIN
Group Art Unit	
Examiner Name	Not yet assigned
Attorney Docket Number	161,700-079

### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume–issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BD	APOSTOLIDES et al., "Intra-aortic Balloon Pump Counterpulsation in the Management of Concomitant Cerebral Vasospasm and Cardiac Failure after Subarachnoid Hemorrhage: Technical Case Report", <i>Neurosurgery</i> , 38:5, May 1996, pp. 1056-1060	
	BE	BHAYANA et al., "Effects of Intraaortic Balloon Pumping on Organ Perfusion in Cardiogenic Shock," <i>Journal of Surgical Research</i> , 26(2):108-113 (1979)	
	BF	BOSTON, et al., "Differential: A New Technique for Isolated Brain Cooling During Cardiopulmonary Bypass," <i>Ann. Thorac. Surg.</i> 69:1346:50.	
	BG	CHEUNG et al., "Relationships Between Cerebral Blood Flow Velocities and Arterial Pressures During Intra-Aortic Counterpulsation," <i>Journal of Cardiothoracic and Vascular Anesthesia</i> , 12:1, pp 51-57, February, 1998	
	BH	EDMUNDS, JR. et al., "An Adjustable Pulmonary Arterial Band", <i>Trans. Amer. Soc Artificial Internal Organs</i> , Vol. XVII, 1972, pp.237-223	
	BI	NANAS et al., "Counterpulsation: Historical Background, Technical Improvements, Hemodynamic and Metabolic Effects," <i>Cardiology</i> , 84:156-167 (1994)	
	BJ	NUSSBAUM et al., "Intra-Aortic Balloon Counterpulsation Augments Cerebral Blood Flow in the Patient with Cerebral Vasospasm; a Xenon-Enhanced Computed Tomograph Study," <i>Neurosurgery</i> , 42(1):206-14 (1998)	
	BK	NUSSBAUM et al., "Intra-Aortic Balloon Counterpulsation Augments Cerebral Blood Flow in a Canine Model of Subarachnoid Hemorrhage-Induced Cerebral Vasospasm," <i>Neurosurgery</i> , 36(4):879-86 (1995)	
	BL	SABISTON, <i>Textbook of Surgery</i> , Sabiston, Ed., W.B. Saunders Company, publisher, 1981, pp. 2462-2463	
	BM	TRANMER et al., "Intra-aortic balloon counterpulsation: a treatment for ishcaemic stroke?" <i>Neurol. Res.</i> , 11(2):109-113 (1989)	
	BN	TRANMER et al., "Pulsatile Versus Nonpulsatile Blood Flow in the Treatment of Acute Cerebral Ischemia," <i>Neurosurgery</i> , 19(5):724-31 (1986)	

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		Number	Kind Code <sup>2</sup> (if known)			
	BO	6,010,522		Barbut et al.	01/2000	
	BP	5,891,012		Downey et al.	04/1999	
	BQ	5,221,258		Shturman	06/1993	
	BR	4,798,588		Ailon	01/1989	
	BS	4,701,160		Lindsay et al.	10/1987	
	BT	4,601,706		Ailon	07/1986	
	BU	3,720,200		Laird	03/1973	
	BV	3,692,018		Goetz et al.	09/1972	
	BW					
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	CN							
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